

Work Order ID 71457

Monday, July 04, 2011 1:30:24 PM



Item ID: D3391-021

Accept



Setup Start



Revision ID:

Stop



Item Name: Fwd Tube Assembly

Start Date: 7/5/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/19/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: ME Date: 11-07-04 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	Rev H								
100		0.00							
	Skidtubes								
Skidtubes	Memo	0.00							
Skidtubes	Cut extrusion to 46.52 +0.010 -0.020								
110		0.00							
	BENDING MACHINE - SKIDTUBES								
CNC Bend 1	Memo	0.00							
CNC Delta 100 Bender	Bend as per Dwg D3391 Using Bend Prog 3391021								
120		0.00							
	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							
Quality Control									

①

11/08/16

JW

11-08-18

①

DP

11-8-18

①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	HAAS CNC VERTICAL MACHINING #1	0.00							
HAAS I	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine as per Folio FA590 Rev. <u>AA</u> & Dwg D3391 Rev. <u>H</u> Identify as D3391-1 2-Deburr			<u>JK 11-08-19</u>		<u>①</u>			
140 	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC	Memo	0.00							
Quality Control				<u>JK 11-08-19</u>		<u>①</u>			
150 	CONVENTIONAL MILLING MACHINE	0.00							
Mill Conv	Memo	0.00							
Conventional Milling Machine	Drill X1 Aft cap as per Dwg D3391 .1875" dia			<u>JK 11/08/23</u>		<u>1</u>			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 3

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC2- Inspect parts off machine FAI/FAIB

0.00

11/08/23

1



QC

Memo

0.00

Quality Control

170

QC8- Inspect parts - second check

0.00

11/08/24

1

0



QC

Memo

0.00

Quality Control

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 	Skidtubes	0.00							
Skidtubes	Memo	0.00							
Skidtubes	1-Drill float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size) (ONLY DRILL HOLES MARKED "A")								
	2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step								
	3-Open tow cap holes to .208" as per Dwg D3391								
	4-Open Tow Ring hole to .640" as per Dwg D3391								
	5- open float bag holes 0.328" and counter sink as per dwg D3391								
	6-Deburr & Scribe Batch number Inside aft end.								
	7-Transfer drill D3391-021 with D3391-023								
190 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

DL 11/12/01

DP 11-12-12

S 11/12/12

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

[illegible]

Monday, July 04, 2011 1:30:24 PM

Accept

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives of the project. These objectives should be clear, measurable, and achievable.

3. The third step is to develop a plan of action. This involves determining the steps that need to be taken to achieve the objectives and assigning responsibilities to team members.

4. The fourth step is to implement the plan. This involves carrying out the tasks and activities that have been planned.

5. The final step is to evaluate the results of the project. This involves comparing the actual outcomes with the objectives and identifying any areas for improvement.

Setup Start

Stop

Abstract

Cust Item ID:

00000000000000000000

Customer:

Reference:

Run Start

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

**Insp.
Stamp**

0.00

1. The first step in the process is to identify the problem. This involves gathering information about the situation and understanding the needs of the stakeholders involved.

2. Once the problem is identified, the next step is to develop a plan. This involves setting goals, identifying resources, and determining the steps that need to be taken to address the problem.

3. The third step is to implement the plan. This involves putting the plan into action and monitoring progress to ensure that the goals are being met.

4. Finally, the fourth step is to evaluate the results. This involves assessing the effectiveness of the plan and making adjustments as needed to improve the outcome.

Memo

0.00

HandFinish

Hand Finishing

0.00

1. The first step is to identify the problem. In this case, the problem is that the company is not meeting its sales targets.

2. The second step is to analyze the problem. This involves identifying the causes of the problem and determining the impact of the problem on the company.

3. The third step is to develop a solution. This involves identifying the actions that need to be taken to address the problem and determining the resources that will be required.

4. The fourth step is to implement the solution. This involves putting the solution into action and monitoring the progress of the implementation.

5. The fifth step is to evaluate the results. This involves comparing the actual results with the expected results and determining the effectiveness of the solution.

Memo

0.00

QC

Quality Control

0.00

[illegible]

Skidtubes

Memo

0.00

Skidtubes

1-instal spacers as per dwg D3391

A/R Magnabond 6398 batch: M117870

exp. date: 03/2012

cure time 12hrs. as per QSI015

2- grind crossbolt flush

3-back drill crossbolt if necessary

2 SAD 11-12-13
5

W/O:		WORK ORDER CHANGES					
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Monday, July 04, 2011 1:30:24 PM



Page 6

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/11/21/16

235

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

AND REALODINE AS PER PAR09-043

① 11-12-16

240

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

10:00

3200F

10:30

11/12/17

WU9480

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Monday, July 04, 2011 1:30:24 PM

Page 7

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

250

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 6 24 11/12/20

255

Skidtubes

0.00



Skidtubes

Memo

0.00

Skidtubes

**** install D3591-1 spacer as per DSI9364 and wearplate and gasket as per
DWG ****

1 6 24 11/12/20

257

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Sum 12/23

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

[illegible]

Monday, July 04, 2011 1:30:24 PM

Accept

[illegible]

Setup Start

[REDACTED]

Stop

[illegible]**Cust Item ID:**

Start Date: 7/5/2011 **Start Qty:** 1.00

Required Date: 7/19/2011 **Req'd Qty:** 1.00

Customer:

Reference:

Run Start

[illegible]

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Operation Description

Set Up/ Run Hours

Tool ID

Tool #Plan
Code

**Accept
Qty**

Reject
QtyReject
Number

Insp. Stamp

260

Identify as per dwg & Stock Location: W/O

0.00

0412-742-043/B75910

[illegible]

Packaging

Memo

0.00

Packaging

280

QC21- Final Inspection - Work Order Release

0.00


[illegible]

QC

Memo

0.00

Quality Control

11/12/28 

Q(12-28)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Monday, July 04, 2011 1:30:22 PM

Page 1

Work Order ID: 71457

Parent Item: D3391-021

Parent Item Name: Fwd Tube Assembly



Start Date: 7/5/2011

Required Date: 7/19/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP A 05.09.13 New issue KJ/JLM
 IPP B 06.02.10 Dwg rev.D ecn 773 EC
 IPP C 06.05.02 Added inspections EC
 IPP D 07.03.13 rev F dwg EC
 IPP E 07.11.07 revG dwg ecn1053P EC verified by: DD
 IPP Rev:f ECN 1056 07-11-12 DD verified by: EC
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC
 IPP Rev J 09.02.02 added hardware EC verified by: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6013-047 Skidtube Material		Manufactured	No			100	Each	14.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG				14					
				26547				14					
D3670-4-200 SPACER		Manufactured	No			220	Each	26.0000	4	4			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG				26					
				70822				26					
D3401-041 Tow Cap Assembly		Manufactured	No			255	Each	2.0000	1	1			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP007				2					
				61505				2					

11/08/16

SAD 11-12-13

72851 1371878 (1) 11/12/20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Monday, July 04, 2011 1:30:22 PM

Page 2

Work Order ID: 571457

Parent Item: D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 7/5/2011

Required Date: 7/19/2011

Start Qty: 1.00

Required Qty: 1.00

D3564-13 Manufactured No
Wearshoe
D4095-051
11.12.23

Location	Loc Qty	Loc Code
FP016	16	
69280	16	

1 1
B 76539 (v1) 11/12/20

D3566-13 Manufactured No
Gasket
11.12.03

Location	Loc Qty	Loc Code
FP	24	
69281	24	
FP014	2	
68341	2	

1 1
N/A

AN960C10L NAS1149C0332 Purchased No
R
washer
AN3C4A Purchased No
BOLT

Location	Loc Qty	Loc Code
ST350	2108	
117313	2	
117688	776	
117795	500	
117872	22	
118012	500	
118112	308	

10 10
M 119736 (v10) 11/12/20
M 118838 (v10) 11/12/20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Monday, July 04, 2011 1:30:22 PM

Page 3

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Parent Item: D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 7/5/2011

Required Date: 7/19/2011

Start Qty: 1.00

Required Qty: 1.00

D3672-1 Manufactured No

255

Each

1,122.000

4

4



Phenolic Washer



Handwritten: 11/12/20

Location

Loc Qty

Loc Code

ST074

1096

64177

596

66821

500

Handwritten: x4

ST077

26

52505

26

AELS-1032-130 Purchased No

255

Each

0.0000

2

2



Handwritten: 11119530 (x2) 11/12/20

INSERT

AELS-1032-225 Purchased No

255

Each

0.0000

10

10



Handwritten: 11118966 (x10) 11/12/20

INSERT

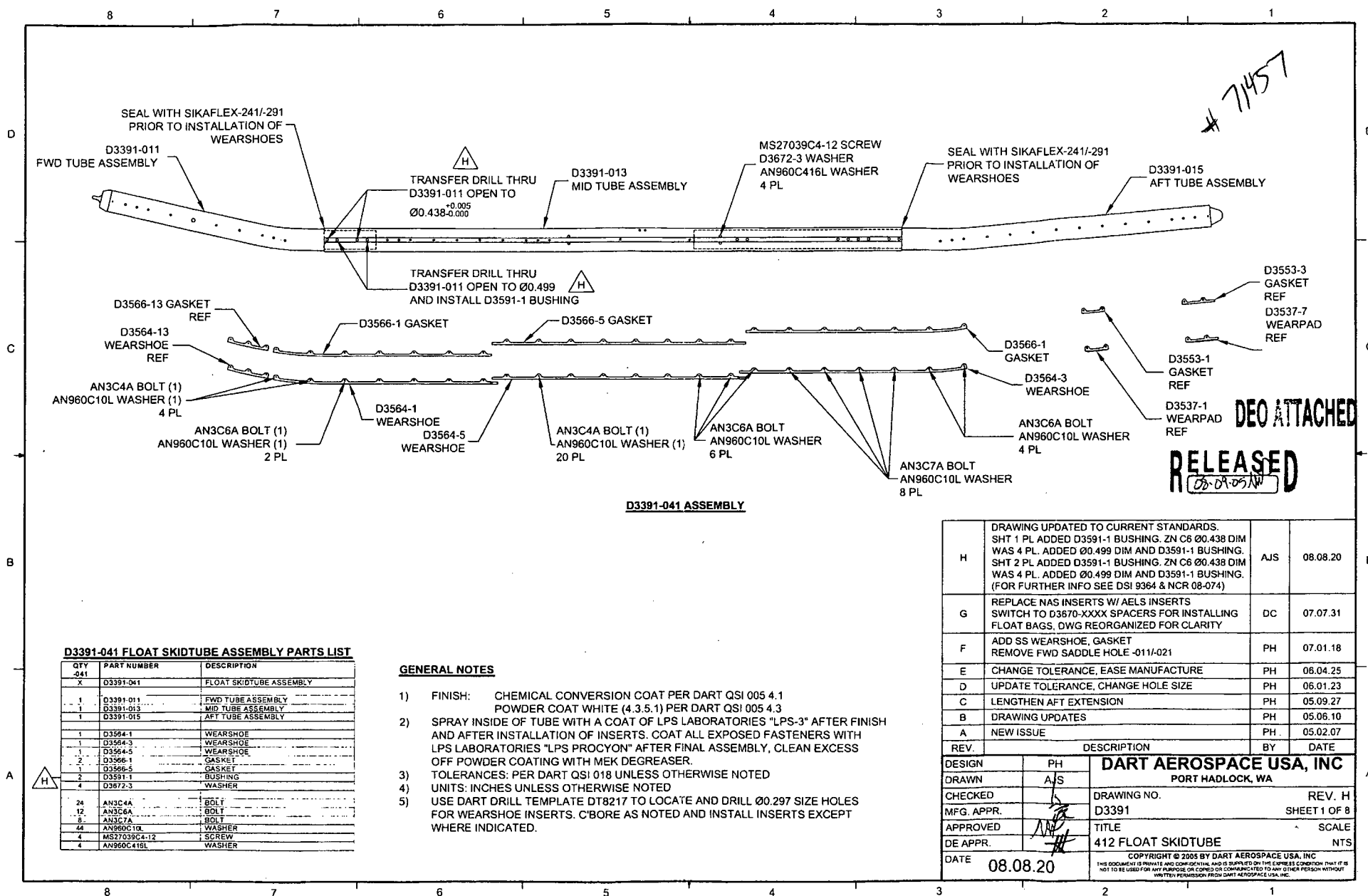
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



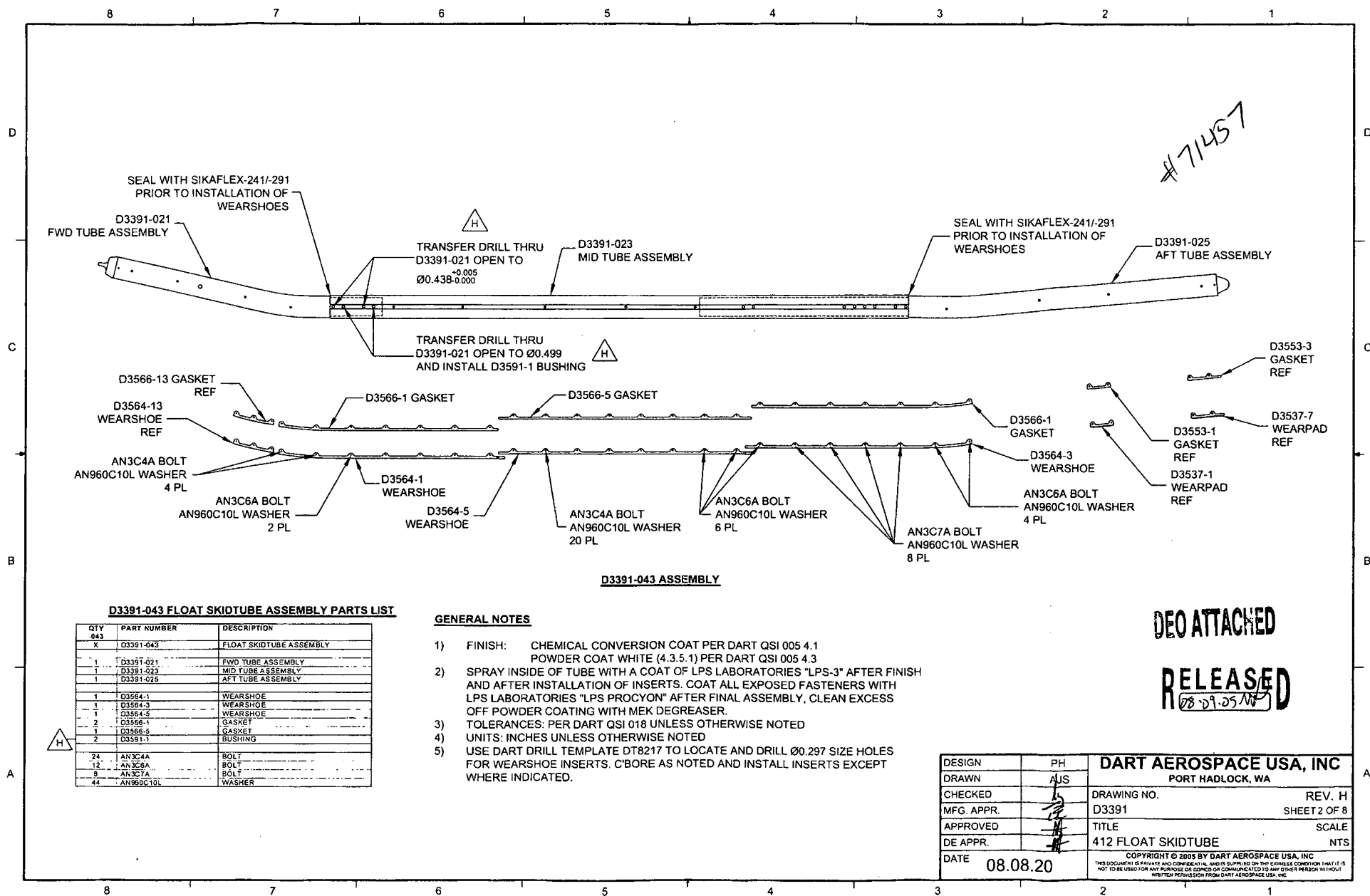
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
1	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
1	D3566-1	GASKET
1	D3566-5	GASKET
2	D3591-1	BUSHING
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. CBORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

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CHECKED				DRAWING NO. REV. H	
MFG. APPR.				D3391 SHEET 2 OF 8	
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DE APPR.				412 FLOAT SKIDTUBE NTS	
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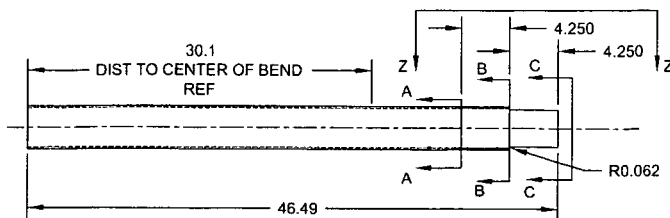
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

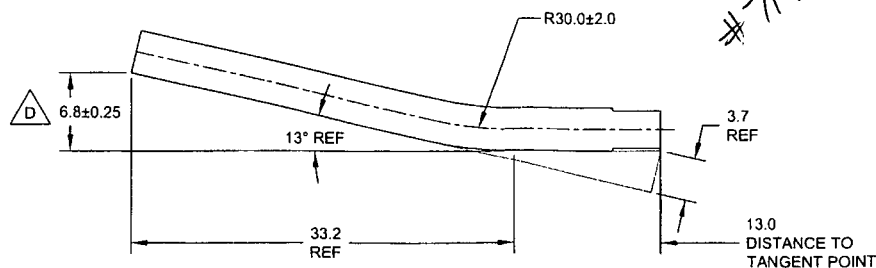
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

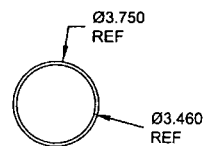
NOTE: Date & initial all entries



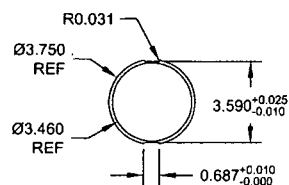
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



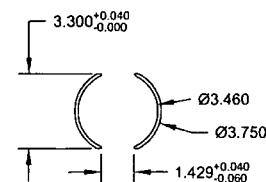
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



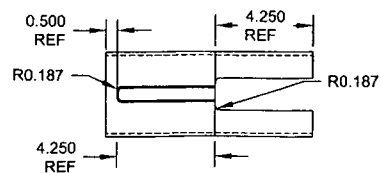
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X







SECTION C-C
SCALE 2X



VIEW Z-Z
SCALE 2X

DEO ATTACHED
RELEASED
28 JAN 05 NW

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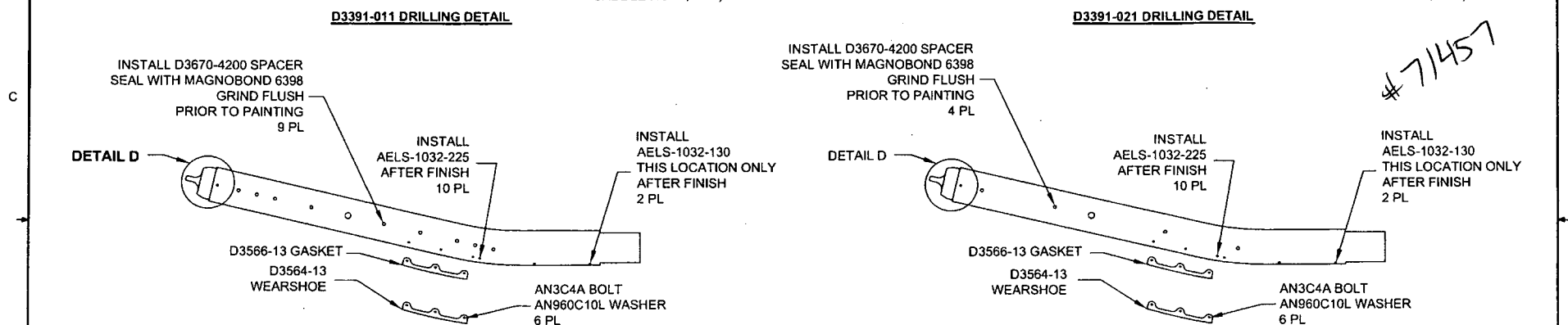
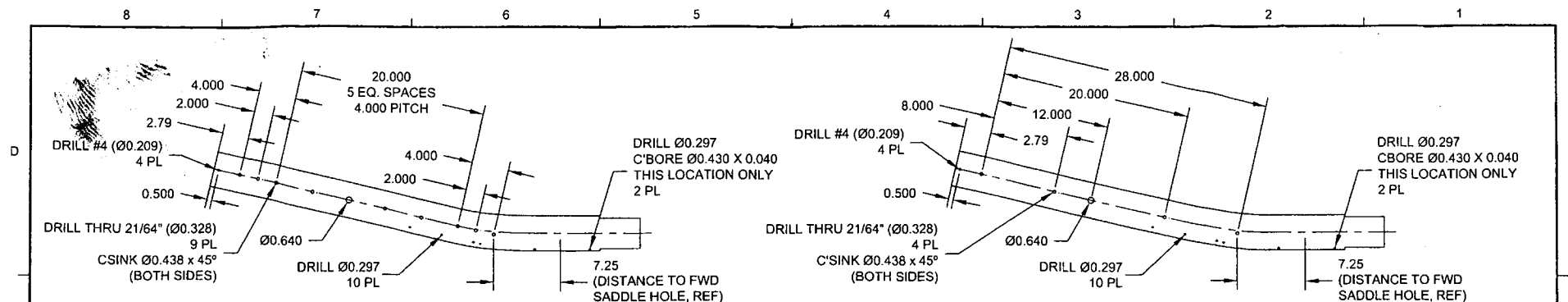
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

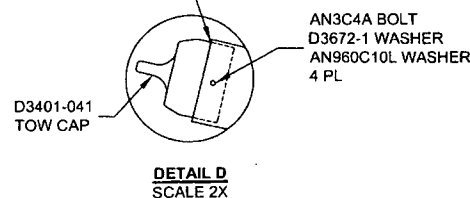
NOTE: Date & initial all entries



D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X	X	D3391-011	FWD TUBE ASSEMBLY
		D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
1	1	D3564-13	WEARSHOE
1	1	D3566-13	GASKET
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
2	2	AELS-1032-130	INSERT
10	10	AELS-1032-225	INSERT

SEAL WITH SIKAFLEX-2411-291



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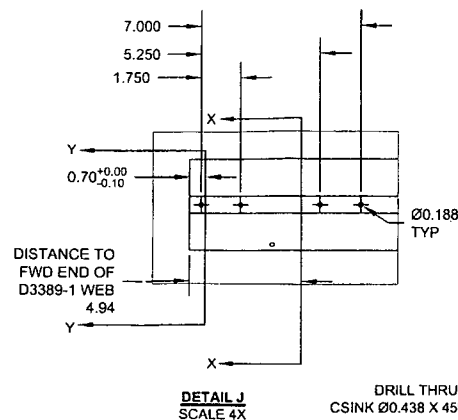
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

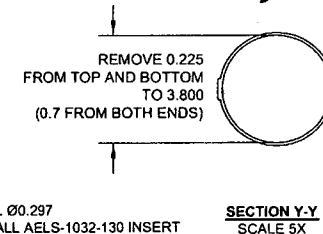
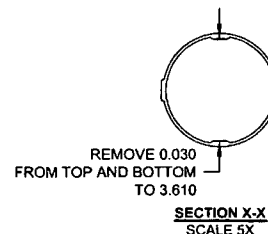
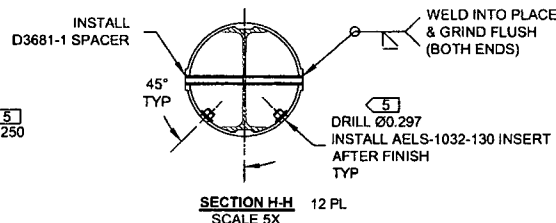
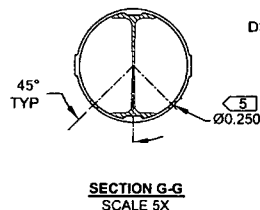
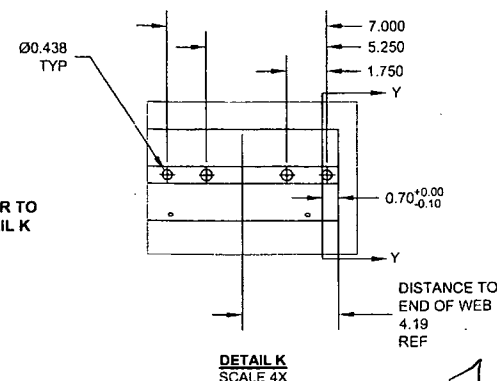
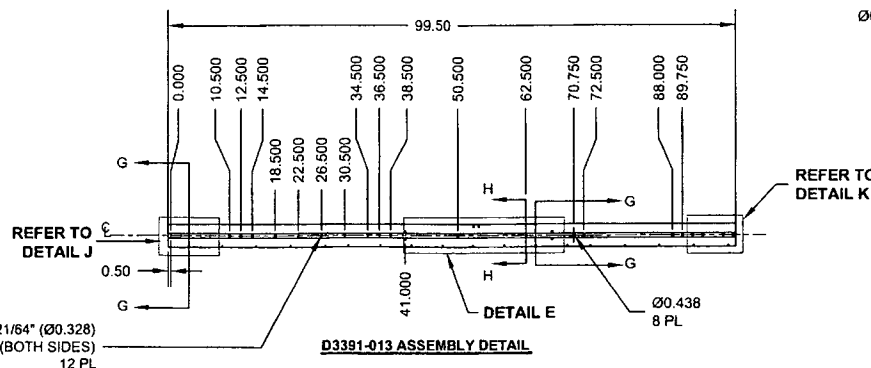
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DRILL THRU 21/64" (Ø0.328)
CSINK Ø0.438 X 45° (BOTH SIDES)
12 PL

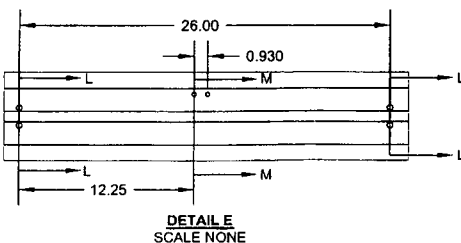


D3391-013 MID TUBE ASSEMBLY PARTS LIST

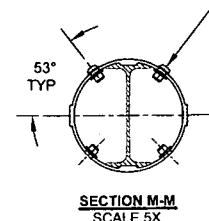
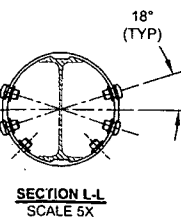
QTY -013	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW

D3391-013 MID TUBE ASSEMBLY

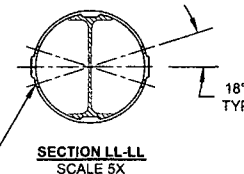
- MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- WELDING: PER DART QSI 004



DRILL Ø0.391
INSTALL ALS4-428-165 INSERT
MS27039C4-08 SCREW
D3672-3 WASHER
AN960C416L WASHER
AFTER FINISH
4 PL



DRILL Ø0.297
INSTALL AELS-1032-130 INSERT
MS27039C1-09 SCREW
D3672-1 WASHER
AN960C10L WASHER
AFTER FINISH
4 PL



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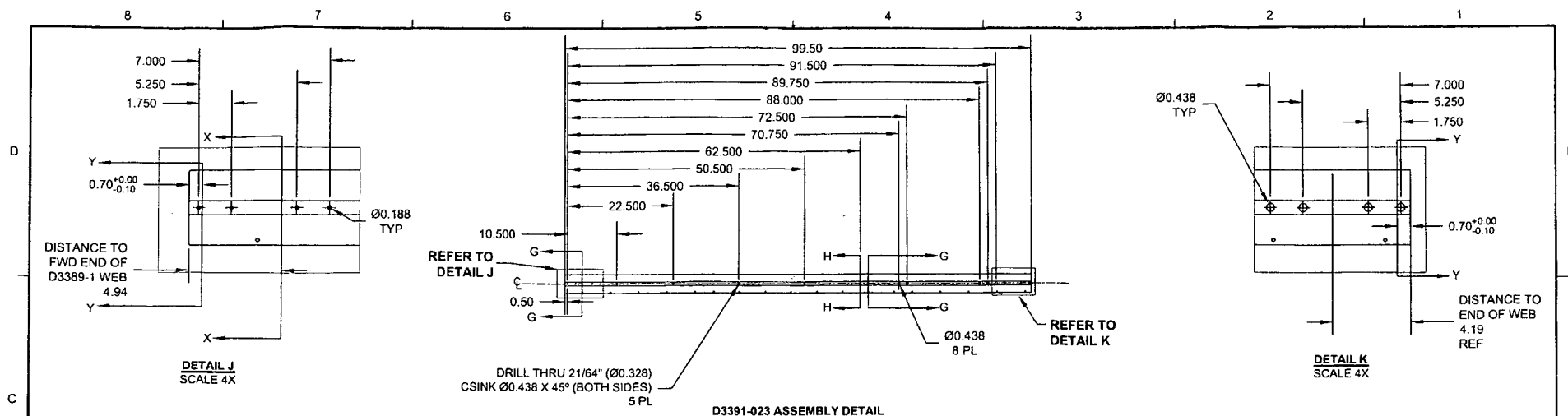
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

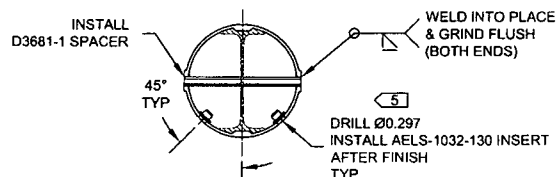
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

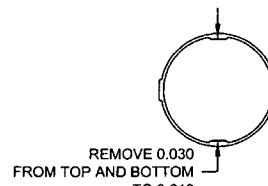
NOTE: Date & initial all entries



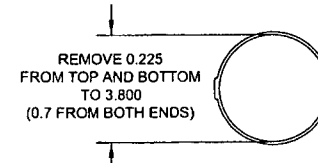
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X



SECTION X-X
SCALE 5X



SECTION Y-Y
SCALE 5X

D3391-023 MID TUBE ASSEMBLY PARTS LIST

QTY -	PART NUMBER	DESCRIPTION
023		
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

D3391-023 MID TUBE ASSEMBLY

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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MFG. APPR.		D3391	SHEET 6 OF 8
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#71457

DEO ATTACHED
RELEASED
08-09-05-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

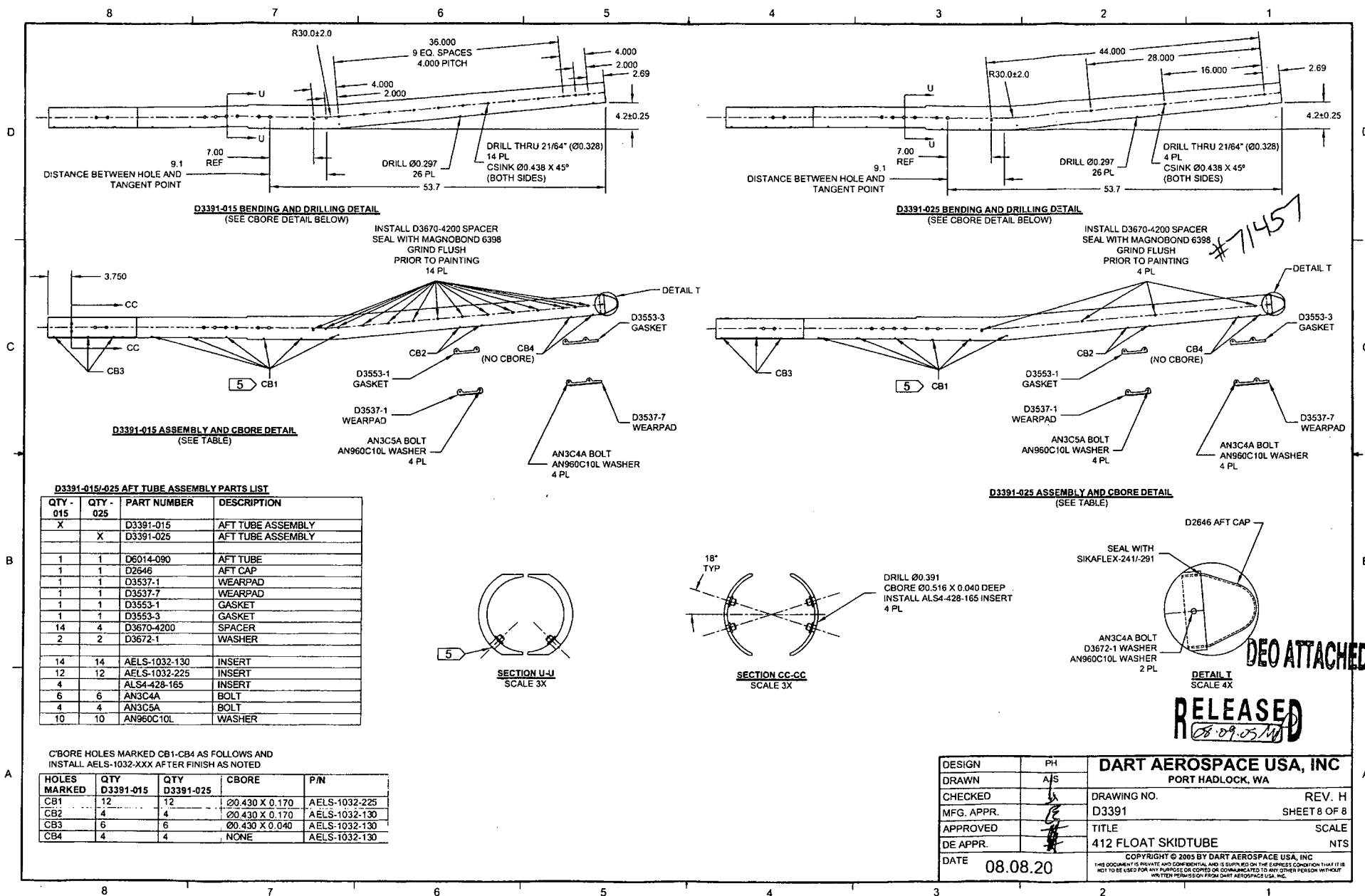
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DRAWING NO. D3391	TITLE 412 FLOAT SKIDTUBE	REV. H	DART AEROSPACE USA, INC ENGINEERING ORDER		D.E.O. NO. D3391-H-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>CP</i>	CHECKED <i>h</i>	MFG. APPR. <i>AA</i>	APPROVED <i>MP</i>		DE APPR. <i>h</i>		
DATE 09.09.23	DATE 06.09.24	DATE 09/09/25	DATE 09/09/30		DATE 09/09/30		

PURPOSE:

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF D3391-041/-043 SKIDTUBES.

CHANGE:

AMEND NOTE 2 OF D3391-041/-043 SKIDTUBE ASSEMBLIES (ZN A6-1, A6-2) AS FOLLOWS:

- 2) ~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH~~
~~AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH~~
 LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS
 OFF POWDER COATING WITH MEK DEGREASER.

RELEASED
 2010-02-02

MP

#71457

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

